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EXAMINER				
NGO, NGUYEN HOANG				
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/780,840  
Filing Date: February 18, 2004  
Appellant(s): BACKES, FLOYD

\_\_\_\_\_  
Holmes W. Anderson  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 3/17/2008 appealing from the Office action mailed 12/13/2007.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

10/780,838; 10/780,840; 10/780,843.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

20030236064	Shiohara	12-2003
20030083095	Liang	5-2003
6522881	Feder	2-2003

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiohara et al. (US 2003/0236064), in view of Liang (US 2003/0083095), hereinafter referred to as Shiohara and Liang.

**Regarding claim 1**, Shiohara discloses a apparatus for use by an access point in a wireless communications environment wherein multiple channels are available for communication (figure 1 and figure 2 and figure 6), comprising:

means for selecting a channel on which to provide service to at least one wireless device by (channel setting module 102 of access point 10 shown in figure 1, page 5. [0089]- [0090]):

sending at least one message indicative of a claim to the selected channel (uses channel set by the channel setting module 102 to transmit and receive signals via the antenna, page 5 [0090]);

if no message indicative of a claim to the selected channel is received from another device, commencing operation on the selected channel (determines that there is no conflict of the channel, page 6 [0100]); and

if a message indicative of a claim to the selected channel is received from another device, thereby indicating conflict, resolving the conflict by at least one of:

selecting a different channel on which to provide service, and reducing transmission power (conflict avoidance module 105 that determines whether or not the preset channel is to be switched over, page 5 [0093]);

Shiohara however fails to specifically disclose the specifics of how the wireless devices as seen in figure 2 connect with the access points of figure 2. Shiohara however discloses the concept of wireless LANs where multiple computers and devices like printers are connected wirelessly via radio waves (page 1 [0004]-[0009]) and further discloses of having more than one access point with overlapping coverage areas and a subnet of devices connected to a specific access point (correlating to selecting a subset of wireless devices, page 5 [0096]-[0097] and figure 2). In a similar field of endeavor, Liang further discloses;

means for determining which wireless devices become associated with the access point by periodically (page 6 [0070]):

sending a message to wireless devices to indicate the presence and its protocol capability of the access point (poll frame from the 802.11 access point, page 6 [0070]);

receiving from wireless devices, messages indicative of requests to become associated with the access point (send a reservation request to the CU 510, page 6 [0070]);

selecting a subset of the wireless devices from which a message was received indicative of a request to become associated with the access point, thereby rejecting some of the requests to become associated (if the request has not been granted, the wireless station cannot transmit, page 6 [0071]); and

sending a message to each selected wireless device to indicate that the access point will allow the selected device to communicate in the wireless communications environment via the access point (if the request has been granted, the wireless station can transmit, page 6 [0071]).

Thus it would have been obvious to incorporate the well known concept of connecting a wireless device to a specific access point through use of polling, request and acceptance messages as disclosed by Liang into the technique of controlling a communication channel to ensure smooth communication in a wireless communication device as disclosed by Shiohara in order to correctly and efficiently connect specific devices to a specific access point (as seen from figure 2).

**Regarding claim 2**, the combination of Shiohara and Liang, more specifically Liang disclose the Apparatus of claim 1 further comprising:

means for receiving a registration request message from a wireless device, wherein the wireless device sends the registration request message to the access point to indicate that the device desires to communicate in the wireless communications environment via the access point using a particular protocol; and

means for sending a registration acknowledge message to the wireless device which sent the registration request message, wherein the access point sends the registration acknowledge message to indicate that the access point understands that the device will communicate in the wireless communications environment using the particular protocol (page 6 [069]-[0074]).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shiohara et al. (US 2003/0236064), in view of Liang (US 2003/0083095), in further view of Feder et al. (US 6522881), hereinafter referred to as Shiohara, Liang, and Feder.

**Regarding claim 3**, the combination of Shiohara and Liang fails to disclose choosing the access point that will provide better wireless communications performance than the current access point.

Feder however discloses a method for use in a wireless communications network that searches for the best serving access point of a base station as a function of communication quality. Each base station 200 includes five access points (AP) that are assigned a different 1MHz channel, (devices in a wireless communications environment wherein multiple channels are available for communication, abstract, and column 4 lines

6-11). A wireless modem 270 in a fixed wireless network executes an AP search/selection sequence in response to a triggering event, such as when service quality degrades below a threshold level. After detecting beacons and obtaining a communication link quality metric for each neighboring access point, the wireless modem selects the best access point based on the communication link quality metric ( message indicative of a request to become associated with the access point is sent by a wireless device to the access point if the device ascertains that the access point is likely to provide better wireless communications performance than another access point through which the device is currently communicating, column 2 lines 59-63, column 3 lines 6-10).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to select an access point with the best communication link quality as taught by Feder into the method of Shiohara, as modified by Liang, in order to efficiently complete a transition or handover.

#### **(10) Response to Argument**

In the appeal brief the applicant argues that the combination of Shiohara and Liang fails to disclose the initial channel selection by APs or messages indicative of the intent to utilize a channel.



Shiohara however discloses of a first wireless communication device (access point) that detects a future or potential trouble in communications (page 1 [0012]) through the use beacon signals (page 1 [0013]). Examiner thus correlates the beacon signals disclosed by Shiohara to the message indicative of a claim to a selected channel (as seen in claim 1). Shiohara further discloses that an access point 10 (figure 2) first determines whether or not the wireless communication module receives a beacon signal transmitted from another device (step s100 of figure 3 and page 6 [0100]) and further discloses that if there is no reception of a beacon signal, the access point 10 determines that there is no conflict of the channel (page 6 [0100]), and thus uses that channel. In the case of a reception of a beacon signal, the access point determines that there is a conflict of the channel and resolves the conflict as seen from page 6 [0100]-[0102] and figure 3. Examiner thus correlates this to messages (beacon signals) indicative to an intent (first determines if there is a conflict before utilization of the channel) to utilize a channel. It should further be noted that it is well known in the art that as access points enters a network, the access point determines any channel conflict (through beacon signals) before actual use of a specific channel.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Art Unit: 2600

Respectfully submitted,

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